

MT-AIMg 3

3.3536

Aluminium-magnesium-alloyed MIG/TIG wire for welding AIMg alloys.

Standard designation

Material No.	3.3536
AWS/ASME SFA-5.10	ER 5754
EN ISO 18273	S Al 5754 (AIMg3)

Main base metals

Aluminium-magnesium alloys
e.g. AIMg 1,8 (3.3326), AIMg 3 (3.3535), sowie AIMn 1 (3.0515)

Physical properties (typical values)

El.conductivity at 20°C [S · m/mm ²]	Thermal conductivity at 20°C [W/(m · K)]	Linear thermal expansions coefficient (20-100°C) [1/K]
20-23	130-170	23,7 · 10 ⁻⁶

Mechanical properties of all – weld – metal (typical values)

Welding process Gas shield Thermal treatment Test temperature			TIG I1 untreated +20°C	MIG I1 untreated +20°C
		[°C]		
0,2%-yield strength	R _{p0,2}	[MPa]	80	80
Tensile strength	R _m	[MPa]	200	200
Elongation	A ₅	[%]	20	20

Average chemical composition of all-weld-metal (%)

Al	Mg	Mn	Cr	Ti
Basic	2,60-3,60	0,50	0,3	0,15

Application notes

For larger work pieces and thicker sections than 15 mm preheat to +150 °C.

Gas types applicable TIG Gas types applicable MIG

I1
I1

TIG rod diameters, unit weights

Diameter [mm]	Length [mm]	Kg per box
1,60	1000	10,0
2,00	1000	10,0
2,40	1000	10,0
3,20	1000	10,0
4,00	1000	10,0
5,00	1000	10,0

MIG welding wire

Diameter 0,8mm 1,0mm 1,2mm 1,6mm

Welding positions MIG acc.to EN ISO 6947

PA, PB, PF

Welding positions TIG acc.to EN ISO 6947

PA, PB, PF

Current/Polarity TIG

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Current/Polarity MIG

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